



Tasmania

Certificate of Accreditation

On-Site Waste Water Management System

This Certificate of Accreditation is hereby issued by the Minister for Justice and Workplace Relations pursuant to Section 59(2) of the Building Act 2000 and Part G2 of the Tasmanian Plumbing Code 2006.

System: **Econocycle Models: ENC10-1, ENC10-2
and ENP10-2**

Manufacturer: **Eco-Septic Pty Ltd, Trading as Econocycle**

Of: **15 Econo Place, Silverdale, NSW, 2752**

*This is to certify that the **Econocycle Models: ENC10-1, ENC10-2 and ENP10-2** as described in Schedule 1, have been accredited as an on-site waste water management system for use in a single dwelling in Tasmania. This accreditation is subject to the conditions of accreditation and permitted uses specified in Schedule 2, and in accordance with the Tasmanian Plumbing Code 2013.*

Director, Building Control

delegate of the Minister for Justice and Workplace Relations

Date of Issue: 10 September 2013

Certificate No: BSR0449/2013

This Certificate of Accreditation is in force until 10 September 2018

SCHEDULE 1: System Description and Specification

Econocycle Aerated Wastewater Treatment System (AWTS) Domestic Models:

ENC10-1, ENC10-2 and ENPI0-2

General

The Econocycle system works on the combined principles of primary settling followed by aerobic treatment and disinfection. All household wastewater enters the tank through the inlet (shown on the left hand side of the diagram below) and settles into the septic zone.

Towards the top of the baffle wall which separates the septic and aeration compartments, there is an outlet which enables the primary treated effluent to trickle into the aeration zone. From this point the effluent is filtered over the growth media plates further breaking down the wastewater.

Once the organic matter has been absorbed within the aerobic (aeration) zone the wastewater passes to the clarification zone (secondary sedimentation process). At this stage the wastewater should be clear and odourless.

Before the treated wastewater is released from the clarification chamber it is circulated through the chlorinator for disinfection. The disinfected wastewater has a free residual chlorine concentration equal to or greater than 0.5 mg/L but not greater than 2.0 mg/L. Chlorine tablets are replenished at quarterly service intervals.

The Econocycle AWTS units can be either a single or two tank concrete constructed units or a lightweight plastic unit. The single tank unit contains all treatment stages in the one large tank whilst the two tank system separates the septic zone into one tank and the aeration clarification and chlorinator in the other tank. All units have a capacity for a population equivalent of up to 10 persons.

System Specifications

ENC10-1

1)	Number of persons	10
2)	Temperature & Humidity range	-2°C - 35°C 12% - 95%
3)	Tanks	Single 7000 L Steel Fabric Reinforced Concrete Tank
4)	Blower	80 L/min Techno Takatsuki 58 watt Hi Blow Air Pump XP-80
5)	Irrigation Pump	Orange SP600 11 watt vortex 7.5 M head with automatic start
6)	Septic Section	3050 L Tank with baffle at 2/3 - 1/3 position
7)	Aeration Section	2500 L minimum of aeration divided into two sections
8)	Clarifier	0.45m ² / 0.45m ² per person / 420 L
9)	Chlorine contact & Pump-Out Tank	420 L Tank with internal pump out section
10)	Media	50m ² (2 packs x 500 x 800 x 800mm) Aqua Cool CFI900
11)	Diffusers	2 x 800mm
12)	Chlorinator	1 Chlorine Canister with space for a second if required



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ENC10-2

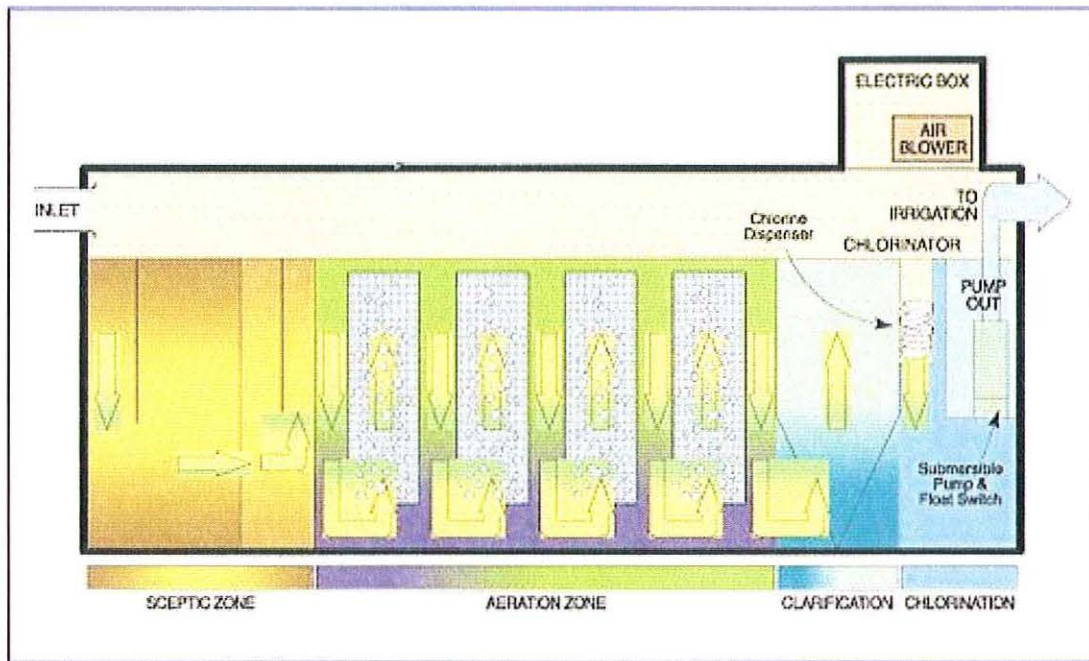
1)	Number of persons	10
2)	Temperature & Humidity range	-2°C - 35°C 12% - 95%
3)	Tanks	Twin 3600 L Steel Fabric Reinforced Concrete Tanks
4)	Blower	80 L/min Techno Takatsuki 58 watt Hi Blow Air Pump XP-80
5)	Irrigation Pump	Orange SP600 11 watt vortex 7.5 M head with automatic start
6)	Septic Section	3600 L Tank with baffle at 2/3 - 1/3 position
7)	Aeration Section	2500 L of aeration divided into two sections
8)	Clarifier	0.3m ² / 0.03m ² per person / 383 L
9)	Chlorine contact & Pump-Out Tank	330 L Tank with internal pump out section
10)	Media	50m ² (4 packs x 500 x 500 x 800mm) Aqua Cool CFI900
11)	Diffusers	4 x 500mm
12)	Chlorinator	1 Chlorine Canister with space for a second if required

ENP10-2

1)	Number of persons	10
2)	Temperature & Humidity range	-2°C - 35°C 12% - 95%
3)	Tanks	Twin 3200 L - Everhard Polypropylene Plastic Tanks; or Twin 3000 L - RELN Polypropylene Tanks
4)	Blower	80 L/min Techno Takatsuki 58 watt Hi Blow Air Pump XP-80
5)	Irrigation Pump	Orange SP600 11 watt vortex 7.5 M head with automatic start
6)	Septic Section	3000 L Tank with baffle at 2/3 - 1/3 position
7)	Aeration Section	2100 L of aeration divided into two sections
8)	Clarifier	0.3m ² / 0.03m ² per person / 383 L
9)	Chlorine contact & Pump-Out Tank	330 L Tank with internal pump out section
10)	Media	50m ² (4 packs x 500 x 500 x 800mm) Aqua Cool CFI900
11)	Diffusers	4 x 500mm
12)	Chlorinator	1 Chlorine Canister with space for a second if required



TYPICAL SYSTEM FLOW DIAGRAM



Schedule 2: Conditions of Accreditation

1. Definitions

In this schedule:

AS/NZS 1547 means Australian/New Zealand Standard AS/NZS 1547:2012 On-site domestic-wastewater management;

AS/NZS 1546.1 means Australian/New Zealand Standard AS/NZS 1546.1:2008 On-site domestic wastewater treatment units, Part 1: Septic tanks;

AS/NZS 3000 means Australian/New Zealand Standard AS/NZS 3000:2000 Wiring rules;

AS/NZS 5667 means Australian/New Zealand Standard AS/NZS 5667.1:1998 Water quality – Sampling, Part 1: Guidance on the design of sampling programs, sampling techniques and preservation and handling of samples;

AWTS means Aerated Wastewater Treatment System;

BOD₅ means 5-day Biochemical Oxygen Demand;

Council means the Municipal Council having jurisdiction;

Commissioned means when the test results from a NATA Certified Laboratory show that the water quality requirements for the AWTS have been met and all pre-commissioning tests have been carried out in accordance with AS/NZS 1547 on all associated equipment and the irrigation system (where installed);

Designer means a person who is accredited under the Building Act 2000 or a Plumber who has a specialty in the area of designing on-site waste water management system installations;

Director means the Director of Building Control appointed under the *Building Act 2000*;

E. coli means *Escherichia coli* of the family Enterobacteriaceae which is a bacterium used in public health as an indicator of faecal pollution;

g/m³ means grams per cubic metre, which is equivalent to milligrams per litre (mg/L)

Informative defines the application of Schedule 1, which is for information and guidance only;

NATA means the National Association of Testing Authorities;

Normative defines the application of Schedule 2, which is an integral part of the Certificate of Accreditation;

PCA means Volume 3 of the National Construction Code Series (Plumbing Code of Australia);

Permit means a Permit issued by the permit authority pursuant to section 82 of the *Building Act 2000*;

Permit authority means a person or body authorised for that purpose by the council of the municipal area in which the on-site waste water management system is or is to be installed;

Plumber means a person who holds an appropriate class of licence under the *Occupational Licensing Act 2005* as a Plumber Practitioner (Certifier);

SS means Suspended Solids;

Supplier means the party that is responsible for ensuring that products meet and, if applicable, continue to meet, the requirements on which the certification is based.' The supplier for the system is ECO-Septic Pty Ltd trading as Econocycle;

System means Econocycle AWTS Models: ENC10-1, ENC10-2 and ENPI0-2;

TN means Total Nitrogen;

TP means Total Phosphorus;

TPC means the Tasmanian Plumbing Code;

TSS means Total Suspended Solids;

2. General

- 2.1. The system must not be installed in a plumbing installation other than in accordance with the conditions of *permit* issued by the *permit authority*.
- 2.2. The system must be supplied, constructed and installed in accordance with the design as submitted and accredited by the *Director*.
- 2.3. Each system must be permanently and legibly marked on a non-corrosive metal plaque or equivalent, attached to the lid with the following information:
- The brand and model name or designation of the system;
 - The manufacturers name or registered trademark;
 - Top load limitations; and
 - The month and year of manufacture.
- 2.4. The manufacturer must supply the owner and occupier, of each installation, with a comprehensive user manual setting out the following:
- The treatment process;
 - Procedures to be followed in the event of a system failure;
 - Emergency contact number;
 - Care, operation, monitoring and maintenance requirements; and
 - Inspection and sampling procedures to be followed as part of the on-going monitoring and maintenance program required by the *permit authority*.
- 2.5. Any proposed modifications to the system's specified processes, equipment, materials, fittings or manuals must be authorised by the *Director* and may be subject to additional verification and/or testing.
- 2.6. The manufacturer must provide the following information to each *permit authority* where it is intended to install a system in their jurisdiction:
- Statement of warranty
 - Statement of service life
 - Quality Assurance Certification
 - Installation Manual
 - Service Manual
 - Owner's Manual
 - Service Report Form
 - Engineering Drawings on A3 format
 - Detailed Specifications
 - Certificate of Accreditation and associated Schedules.
- 2.7. The manufacturer is to keep a register of all installed systems in Tasmania. At each anniversary of the accreditation date, the manufacturer is to provide a list of all their accredited systems installed in Tasmania by anniversary year of installation to the *Director*.
- 2.8. This Certificate of Accreditation is valid for five (5) years from the date of issue or until withdrawn by the *Director* and is not transferable and replaces any previous Certificates issued for the system under the *TPC*. Any application for variation or renewal must be accompanied by Product Certification that has been issued by a JAS-ANZ accredited Conformity Assessment Body (CAB) and other required documentation in accordance with the latest Application for Accreditation Form.
- 2.9. At each anniversary of the accreditation date the *supplier* must submit to the *Director* a list of all systems installed in Tasmania during the previous 12 months. Where the *Director* is notified of

any system failures the Director may randomly select a number of installed systems for audit. The Director will notify the *supplier's* nominated NATA accredited laboratory which systems are to be audited for *BOD₅* and *TSS*. The sampling and testing of the selected systems, if required, is to be done at the *supplier's* expense. The following results must be reported to the Director:

- Address of premises;
- Date inspected and sampled;
- Sample identification number;
- *E. coli* for influent and effluent;
- *BOD₅* for influent and effluent; and
- *TSS* for influent and effluent.

- 2.10. Where the system has been found not to operate satisfactorily during their serviceable life, and as a result require modification to achieve the required water quality limits, the installed systems are to be modified accordingly.
- 2.11. The system must not be deployed to areas where the annual climatic conditions will negatively impact on their proper operation (refer to system specifications).
- 2.12. When considering an application for a permit to install a system the permit authority is to satisfy itself that, the designer's choice of the system configuration is optimal for the proposed use and site conditions.
- 2.13. Prior to the granting of a permit to install a system the following reports (see AS/NZS 1547 Clause 7.4) must be submitted with an application to the permit authority:

2.13.1. Site-and-soil evaluation report

The site and soil evaluation report is to detail results of an assessment of the individual lot(s) for the public health, environmental, legal and economic factors which are likely to impinge on the location and design of a land-application system. (Refer to AS/NZS 1547 Clause 5.2.4 and Appendices B, C, D, E & G).

2.13.2. Design report

- (a) A Design Report is to be provided and is to include the following:
- (b) Relevant aspects of the Site-and-soil Evaluation Report;
- (c) A report on the selection of the land-application system (Refer to AS/NZS 1547, Clause 5.5.7);
- (d) A report on the selection of the wastewater-treatment unit (Refer to AS/NZS 1547, Clause 5.5.4 Appendix H and J);
- (e) Sufficient information to show that the relevant performance requirements set out in the PCA have been met; and
- (f) A loading certificate which sets out the design criteria and the limitations associated with use of the system and incorporates such matters as:
 - i. System capacity (number of persons and daily flow);
 - ii. Summary of design criteria;
 - iii. The location of and use of reserve areas;
 - iv. Use of water efficient fittings, fixtures, or appliances;
 - v. Allowable variation from design flows (peak loading events);
 - vi. Consequences of changes in loading (due to varying wastewater characteristics);
 - vii. Consequences of overloading the system;
 - viii. Consequences of underloading the system;



- ix. Consequences of lack of operation, maintenance and monitoring attention; and
 - x. Any other relevant considerations related to the use of the system.
- 2.14. The following reports must be submitted to the *permit authority* and made available to the *Director* upon request after *commissioning* of the system:
- 2.14.1. Installation and commissioning report
- Where an Installation and Commissioning Report is required it is to cover the 'as-constructed' records of the system installation together with the results of any required commissioning tests to demonstrate correct construction and installation and is to be provided to the owner and permit authority on completion of the work. (Refer to and AS/NZS 1547 Clause 6.2.5.4).
- 2.14.2. Inspection and Maintenance Report
- Maintenance reports covering any required ongoing inspection and maintenance operations in order to monitor the operation of the installation. (Refer to AS/NZS 1547 Clause 6.3.5, Appendix T & U).
- 2.15 Effluent distribution by surface or subsurface irrigation may be permitted where the *Permit Authority* is satisfied that the application for a permit to install the system has demonstrated that the:
- (a) effluent can be retained within the authorised land application area;
 - (b) irrigation system has been designed and is capable of being installed and maintained in accordance with AS/NZS 1547;
 - (c) the location of the land application system satisfies the relevant requirements of the *State Policy on Water Quality Management 1997*; and
 - (d) the discharge is capable of satisfying the relevant water quality limits (see 5.6 below).

3. Installation and Commissioning

- 3.1. The installation and operation of the *system* must comply with the conditions of accreditation and the manufacturer's instructions.
- 3.2. All plumbing work carried out in connection with the *system* must satisfy the requirements of the *Building Act 2000*, *TPC* and the *Tasmanian Plumbing Regulations* and be carried out by a *plumber* with the appropriate competencies.
- 3.3. All installations of the *system* must satisfy the installation requirements set out in *Appendix A1 – On-site Waste Water Management Systems* of the *TPC*.
- 3.4. All electrical work must be carried out by a licensed electrician and in accordance with relevant provisions of *AS/NZS 3000*.
- 3.5. Each *system* installation must be inspected and checked by the *designer* or the *designer's* agent. The *designer* on completion is to certify that the *system* has been constructed, installed and *commissioned* in accordance with the design, the conditions of accreditation and any additional requirements set out in the *permit*.
- Note:** Where the *designer* is not available to supervise the installation the *designer* should obtain signed certification from the installing plumber stating that the installation has been constructed/installed and commissioned in accordance with its design and the conditions of the *Permit*.
- 3.6. Where discharging wastewater to a land application system by shallow sub-surface or aboveground irrigation, a lockable sampling tap or gate valve is to be provided on the outlet pipe to the irrigation system.
- 3.7. A report is to be prepared by the *council* approved maintenance contractor detailing the inspection of the installation and the results of the *commissioning* tests and be accompanied by a certificate certifying that the *system* is operating and performing adequately.

- 3.8. Copies of the following reports/certificates must be submitted to the *council* and the owner as soon as practicable after the *commissioning* of the system and after each scheduled or unscheduled service for the period specified in the permit:
- (a) The initial plant installation and *commissioning* report;
 - (b) All required laboratory analytical test reports; and
 - (c) All inspection and maintenance reports accompanied by a certificate referred to in condition 3.5.
- 3.9. Copies of any report or certificate required by the conditions of accreditation must be made available to the *Director* on request.
- 3.10. The *designer* is to provide a statement warning the user of the system of which items and products must not be placed in the system.
- 3.11. To verify that the plant is *commissioned*, sampling must be carried out, by a council approved person, for *BOD₅*, *SS*, *E. coli* and Free Residual Chlorine. The samples are to be tested and reported on by a NATA certified laboratory.

4. Maintenance

- 4.1. Each installation including the irrigation system must be serviced and maintained by a licensed plumbing contractor at not less than 3 monthly intervals in accordance with the conditions of accreditation, the conditions of *permit* and *supplier's* instructions.
- 4.2. The owner of the system must enter into and maintain a maintenance contract with the *council*, the *supplier* of the system, or other *council* approved person.
- 4.3. The owner must enter into an agreement with the *council* to maintain the maintenance contract where that contract is with the *supplier* or other *council* approved person.
- 4.4. The systems must be operated and maintained to ensure they perform continuously and without intervention between inspections carried out by the *council* approved licensed plumbing contractor.
- 4.5. A service report is to be prepared by the approved plumbing contractor detailing the inspection of the installation and the results of all servicing tests and conditions at the completion of all scheduled or unscheduled inspections.
- 4.6. The service report is to be accompanied by a signed certificate certifying that the system is operating and performing adequately.
- 4.7. A copy of the service report and certificate is to be provided to the occupant and *council*. Each service report is to contain a statement reminding the user of the system of which items and products must not be placed in the system.
- 4.8. Each service must include monitoring the operation of the plant and land application system.
- 4.9. Maintenance must be carried out on all mechanical, electrical and functioning components of the system as appropriate.
- 4.10. The servicing and reporting of the installation must include but not be restricted to the following matters:
- (a) Reporting on weather conditions, ambient temperature, effluent temperature;
 - (b) Odour;
 - (c) Check and test pump
 - (d) Check and test air blower, fan or air venturi and clean/replace air filters;
 - (e) Check and test alarm system;
 - (f) Check and report on slime growth on filter media;
 - (g) Check and report operation of sludge return, sludge level and desludging;

- (h) Check and record water meter reading;
 - (i) Check and record trench operation;
 - (j) Check and record operation of irrigation area, irrigation fittings including flush valve, flush return line, air/vacuum release valves etc.;
 - (k) Check and clean/replace irrigation filters;
 - (l) Check and report on water quality (testing for, pH, Turbidity, and Dissolved Oxygen)
 - (m) Check and report on disinfection agent and record quantity added
 - (n) Cleaning of the following items at above the waterline—
 - i. Clarifier;
 - ii. chlorine detention chamber;
 - iii. pipework;
 - iv. valves;
 - v. walls of chambers.
- 4.11. The system is to be desludged at not greater than 5 yearly intervals and strictly in accordance with the *supplier's* recommendations.
- 4.12. The removal and disposal of sludge must satisfy the relevant requirements of the *Tasmanian Biosolids Reuse Guidelines* published by the Department of Primary Industries and Water.

5. On-going management

- 5.1 Mandatory testing for Free Residual Chlorine is to be carried out, every three months and is to commence 3 months after the plant is commissioned, by using a Lovibond® or equivalent quality testing kit. The testing is to coincide with the *supplier's* required on-going routine scheduled maintenance program.

NOTE: It is recommended that the *council* cause annual random surveillance for *E. coli* at not less than 25% of the installations at the individual owner's expense. All installations should be monitored over a four-year period.

- 5.2 Where any systems have been found not to operate satisfactorily during their service life, and as a result require modification to achieve the required performance requirements, in particular, water quality limits, the installed systems are to be modified accordingly.
- 5.3 In the event of failure to comply with the water quality limits set out in these conditions, fortnightly sampling and testing for *BOD₅*, *TSS* and *E. coli* and Free Residual Chlorine as appropriate must be carried out until the plant is *commissioned*.
- 5.4 The method of preserving and the handling of samples taken from the plant must satisfy the relevant requirements of *AS/NZS 5667*.
- 5.5 Where disposing to a land application system by shallow subsurface or aboveground irrigation, a lockable sampling tap or gate valve is to be provided on the outlet pipe leading to the irrigation system from the unit.
- 5.6 Effluent from the system taken in any random grab sample when tested must not exceed the following water quality limits for:
- (a) All discharges:
 - i. *BOD₅* no sample greater than 30 g/m³.
 - ii. *TSS* no sample greater than 45 g/m³.
 - (b) Surface and covered surface drip irrigation
 - i. As for (a); and
 - ii. *E. coli* no sample exceeding 100 cfu (or MPN) per 100 mL; and

- iii. For where chlorination is the disinfection process the Free Residual Chlorine (FAC) concentrations must be between 0.5 g/m³ 2.0 g/m³ at the maximum effluent flow rate of 10 L/min.
- 5.7 Copies of the following reports and certificates must be submitted to the *Permit Authority* and the owner as soon as practicable after the *commissioning* of the system and after each scheduled or unscheduled service for the period specified in the permit:
- (a) the initial plant installation and *commissioning* report;
 - (b) all laboratory analytical test reports; and
 - (c) all inspection and maintenance reports accompanied by a certificate referred to in condition 3.7.
- 5.7 The system is to be desludged strictly in accordance with the manufacturer's recommendations and the sludge is to be disposed of in accordance with the Biosolids Reuse Guidelines (Tasmania) and the conditions of *permit*.
- 5.8 Only persons with a waste transport business Environment Protection Notice are to be engaged for the removal, transporting and disposal of accumulated sludge removed from the system.
- 5.9 Any waste material removed from the system must be collected and disposed of or utilised by an approved facility or agency.
- 5.10 Measures are to be put in place during servicing that will protect the environment, personnel and any other persons who could be affected by the activity.

6. Permitted uses

The effluent is suitable for land application by way of the following forms:

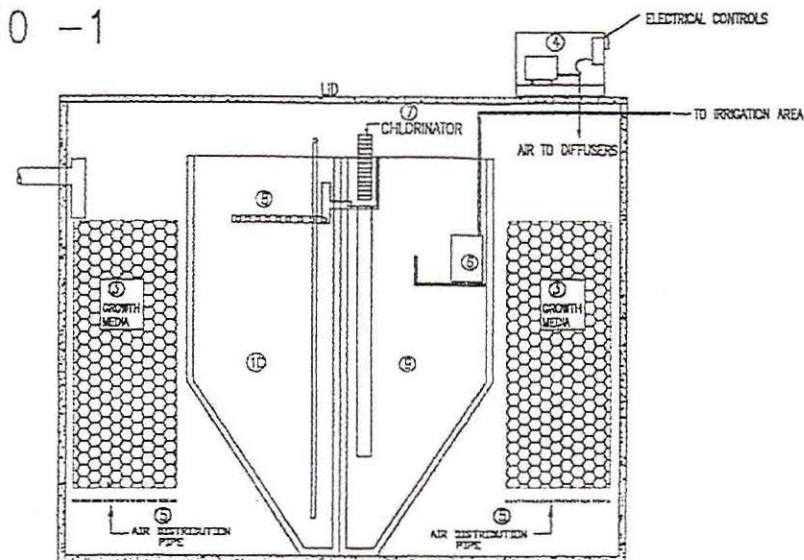
- (a) Trenches, beds, ETA and ETS systems (see Appendix L of AS/NZS 1547);
- (b) Drip irrigation systems (secondary effluent):
 - i. shallow subsurface drip irrigation installed at 100 mm – 150 mm depth into 150 mm to 250 mm of topsoil in grassed or other suitably vegetated areas. The secondary treated effluent must be distributed from a system of pressure compensating drip emitters into the topsoil layer (see Figure M1 of AS/NZS 1547);
 - ii. covered surface drip irrigation installed directly at the surface of the soil under a cover layer of mulch or other authorised cover material which must be held in place by durable bird resistant mesh netting pinned securely to the ground surface. The mulch or other authorised cover material must be maintained at 100 mm – 150 mm depth (see Clause M3.2 of AS/NZS 1547);
- (c) Spray irrigation (disinfected secondary effluent). In accordance with AS/NZS 1547 (see Appendix M4 and Figure M2);
- (d) Mound systems (see Appendix N of AS/NZS 1547)

Note: Each of the above forms of irrigation is subject to consent from the *permit authority* and the relevant provisions of AS/NZS 1547.

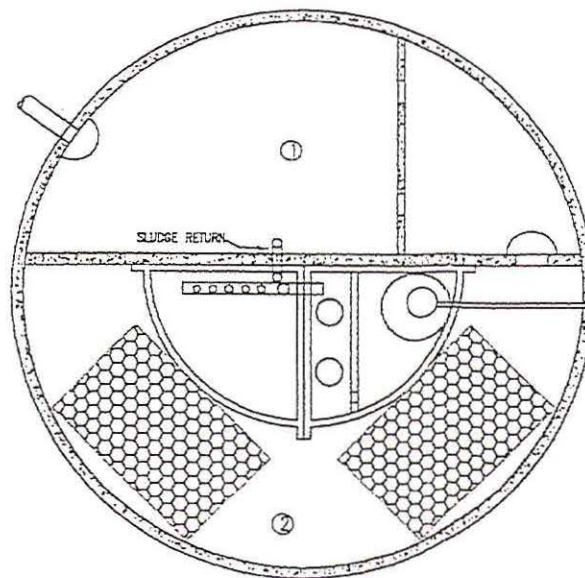
Where it is not practicable for effluent from the system to be applied in accordance with AS/NZS 1547 the method of discharge must satisfy contemporary relevant regulatory requirements to the satisfaction of the *permit authority*.

APPENDIX:A – ENC10 – 1

MODEL ENC 10 -1



ITEM NO.	DESCRIPTION	SPECIFICATION	QTY
	NUMBER OF PEOPLE USING FACILITIES	10 EP	
1	CONCRETE SINGLE SEPTIC TANK	BAFFLED 2/3 - 1/3 COMPARTMENTS 3050L MIN.	1
2	AERATION COMPARTMENT	2500L MIN.	1
3	GROWTH MEDIA	500 x 800 x 1200 PACKS 50m2 SURFACE AREA	2
4	AIR BLOWER	80L / MINUTES MIN.	1
5	AIR DIFFUSERS	PLASTIC 300LG INDEWOOD TECH.	2
6	IRRIGATION PUMP	MIN. HEAD 7.5 m	1
7	CHLORINATOR	100mm PVC PIPE AND FITTING TO SUIT MINIMUM 10 TABLETS - 6 MONTHS CAPACITY	1
8	WEIR / SKIMMER	50mm PIPE WITH 10mm HOLES	1
9	CHLORINE CONTACT AND PUMP OUT TANK	420L	1
10	CLARIFIER TANK	MIN. SURFACE AREA 0.45m2	1



Econocycle
AERATED WASTEWATER TREATMENT SYSTEMS
15 Econo Place Silverdale NSW 2752

DESIGNED BY: LOCHBAR HOLDINGS PTY. LTD.
CIVIL, ENVIRONMENTAL & HYDRAULIC ENGINEERS
SUITE 2/403 HIGH ST. PENRITH N.S.W. 2750
PH - 02 47 211377 FAX - 02 47 302922

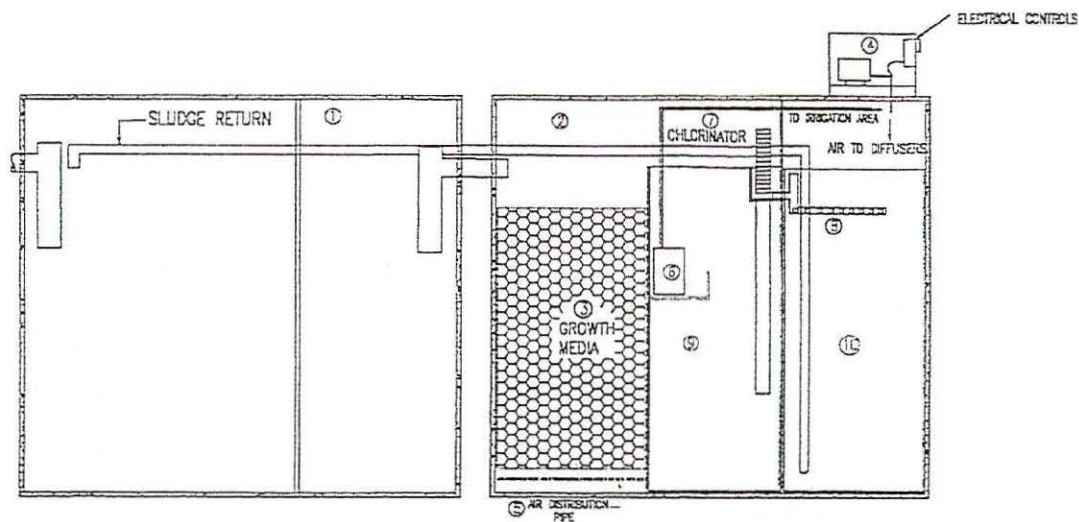
MODEL NO. ENC 10 -1 DATE: 07/01/2000 DWG NO. 27 ENC 10 - 1

Date of issue: 10 September 2013

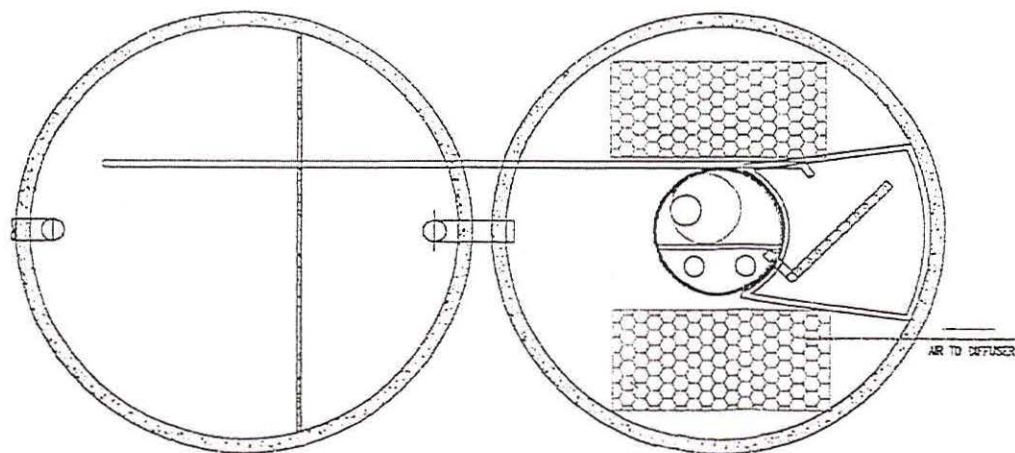
Director, Building Control
delegate of Minister for Justice and Workplace Relations

APPENDIX: B – ENC 10 – 2

MODEL ENC 10 – 2



ITEM NO.	DESCRIPTION	SPECIFICATION	NO. OF
	NUMBER OF PEOPLE USING FACILITIES	10 EP	
1	CONCRETE SEPTIC TANK	BAFFLED 2/3 – 1/3 COMPARTMENTS 3300L	1
2	AERATION COMPARTMENT	2500L	1
3	GROWTH MEDIA	500 x 300 x 1200 PACKS 30m ² SURFACE AREA	2
4	AIR BLOWER	30L / MINUTES MIN.	1
5	AIR DIFFUSERS	PLASTIC 3000S INGHAM TECH.	2
6	IRRIGATION PUMP	MIN. HEAD 7.5 m	1
7	CHLORINATOR	100mm PVC PIPE AND FITTING TO SUIT MINIMUM 10 TABLETS – 5 MONTHS CAPACITY	1
8	WEIR / SKIMMER	50mm PPE WITH 10mm HOLES	1
9	CHLORINE CONTACT AND PUMP OUT TANK	330L	1
10	CLARIFIER TANK	MIN. SURFACE AREA 0.42m ²	1



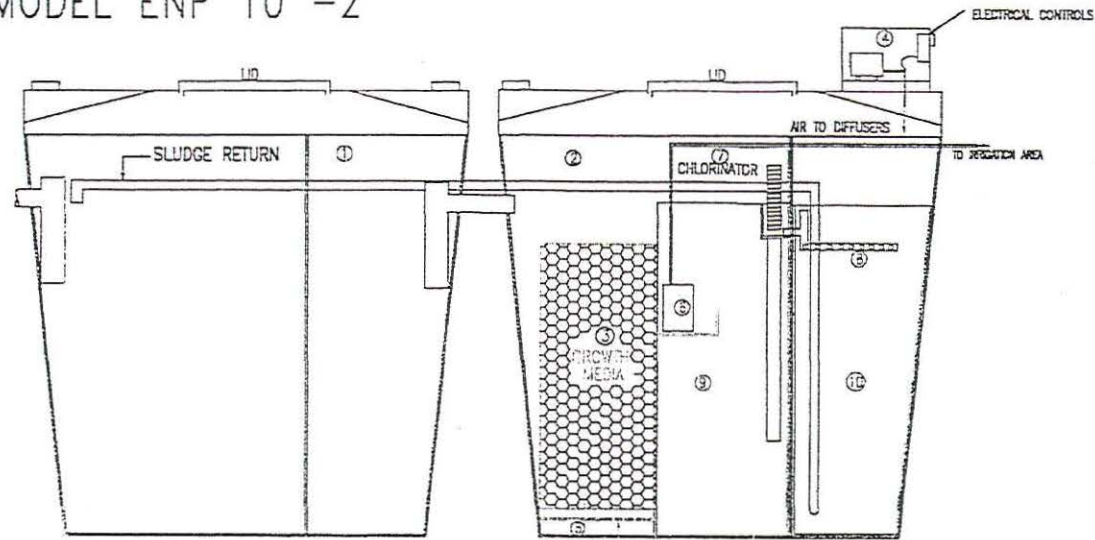
Econocycle
 AERATED WASTEWATER TREATMENT SYSTEMS
 15 Econo Place Silverdale NSW 2752

DESIGNED BY: LOCHBAR HOLDINGS PTY. LTD.
 - CIVIL, ENVIRONMENTAL & HYDRAULIC ENGINEERS
 SUITE 2/403 HIGH ST. PENRITH N.S.W. 2750
 PH - 02 47 211377 FAX - 02 47 302022

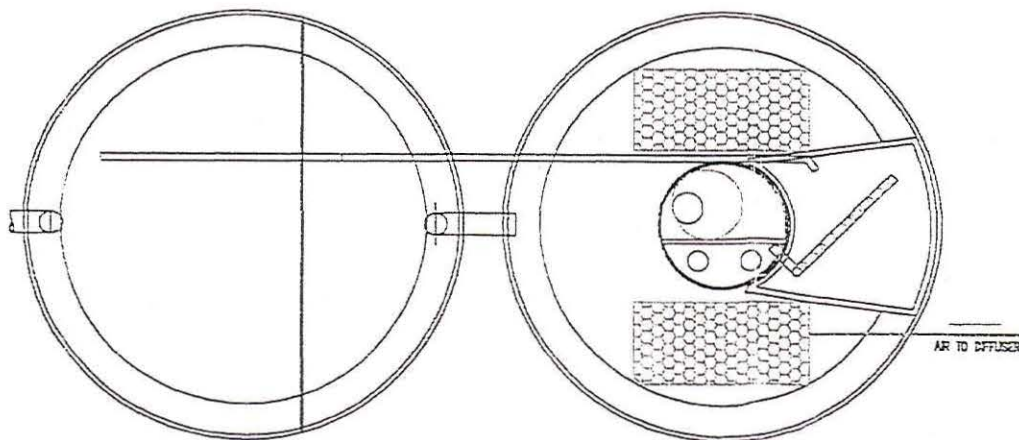
MODEL NO. ENC 10 – 2 DATE: 7/01/2009 DWG NO. 27 ENC 10 – 2

Date of issue: 10 September 2013

 Director, Building Control
 delegate of Minister for Justice and Workplace Relations

APPENDIX: C – ENP10 – 2**MODEL ENP 10 -2**

ITEM NO.	DESCRIPTION	SPECIFICATION	NO. QTY
	NUMBER OF PEOPLE USING FACILITIES	10 EP	
1	PLASTIC SEPTIC TANK	BAFFLED 2/3 - 1/3 COMPARTMENTS 3000L	1
2	AERATION COMPARTMENT	2300L	1
3	GROWTH MEDIA	500 x 800 x 1200 PACKS 50m2 SURFACE AREA	2
4	AIR BLOWER	80L / MINUTES MIN.	1
5	AIR DIFFUSERS	PLASTIC 300LG INGEWOOD TECH.	2
6	IRRIGATION PUMP	MIN. HEAD 7.5 m	1
7	CHLORINATOR	100mm PVC PIPE AND FITTING TO SUIT MINIMUM 10 TABLETS - 6 MONTHS CAPACITY	1
8	WEIR / SKIMMER	50mm PIPE WITH 10mm HOLES	1
9	CHLORINE CONTACT AND PUMP OUT TANK	330L	1
10	CLARIFIER TANK	MIN. SURFACE AREA 0.42m2	1



Econocycle
 AERATED WASTEWATER TREATMENT SYSTEMS
 15 Econo Place Silverdale NSW 2752

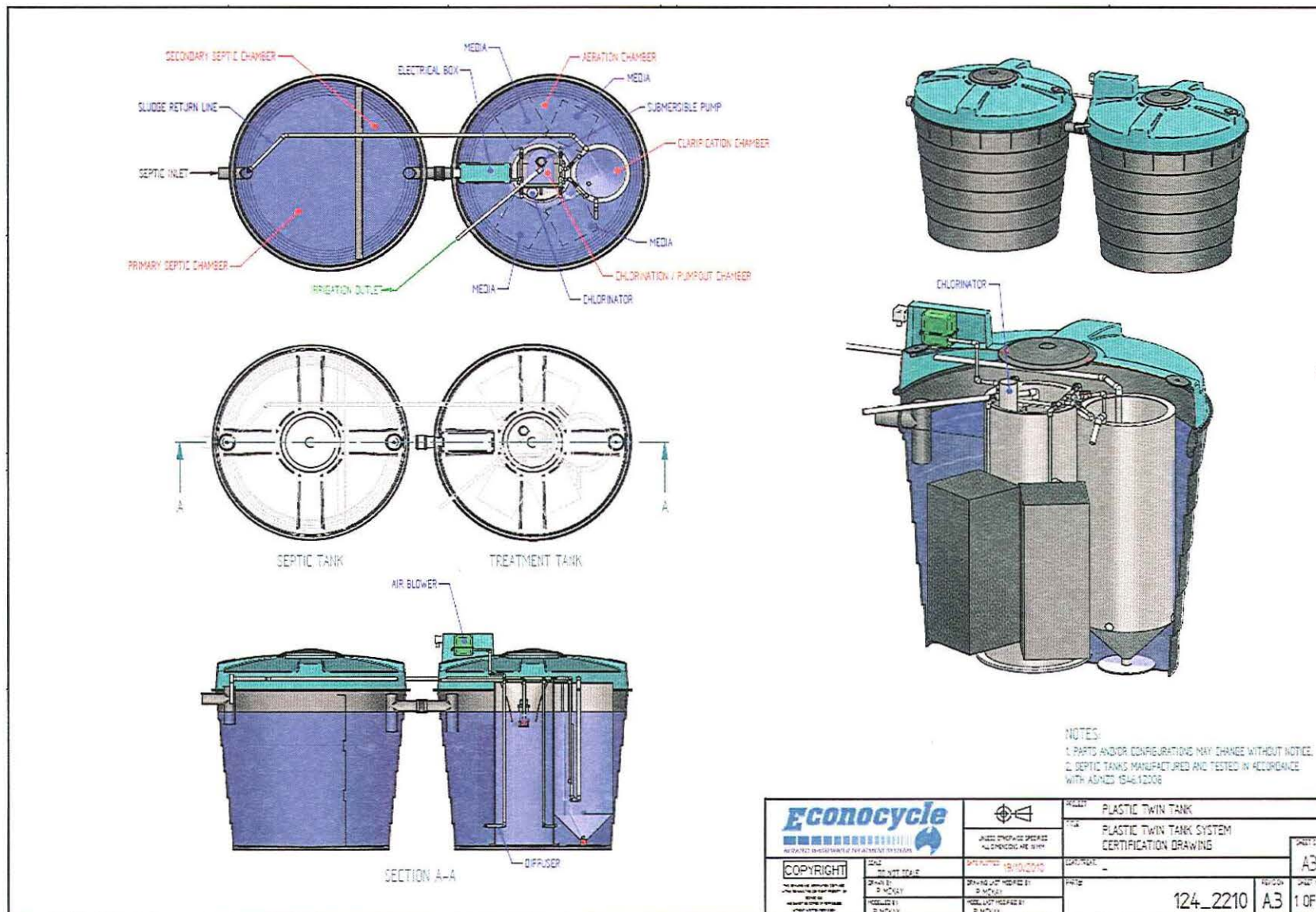
DESIGNED BY: LOCHLEAR HOLDINGS PTY. LTD.
 CIVIL, ENVIRONMENTAL & HYDRAULIC ENGINEERS
 SUITE 2/483 HIGH ST. PERTH W.A. 2700
 PH - 08 47 211377 FAX - 08 47 302922

MODEL NO. ENP 10 -2 DATE: 07/01/2000 DWG NO. 27 ENP 10 - 2

Date of issue: 10 September 2013

 Director, Building Control
 delegate of Minister for Justice and Workplace Relations

ENPI 0-2 Tank Assembly

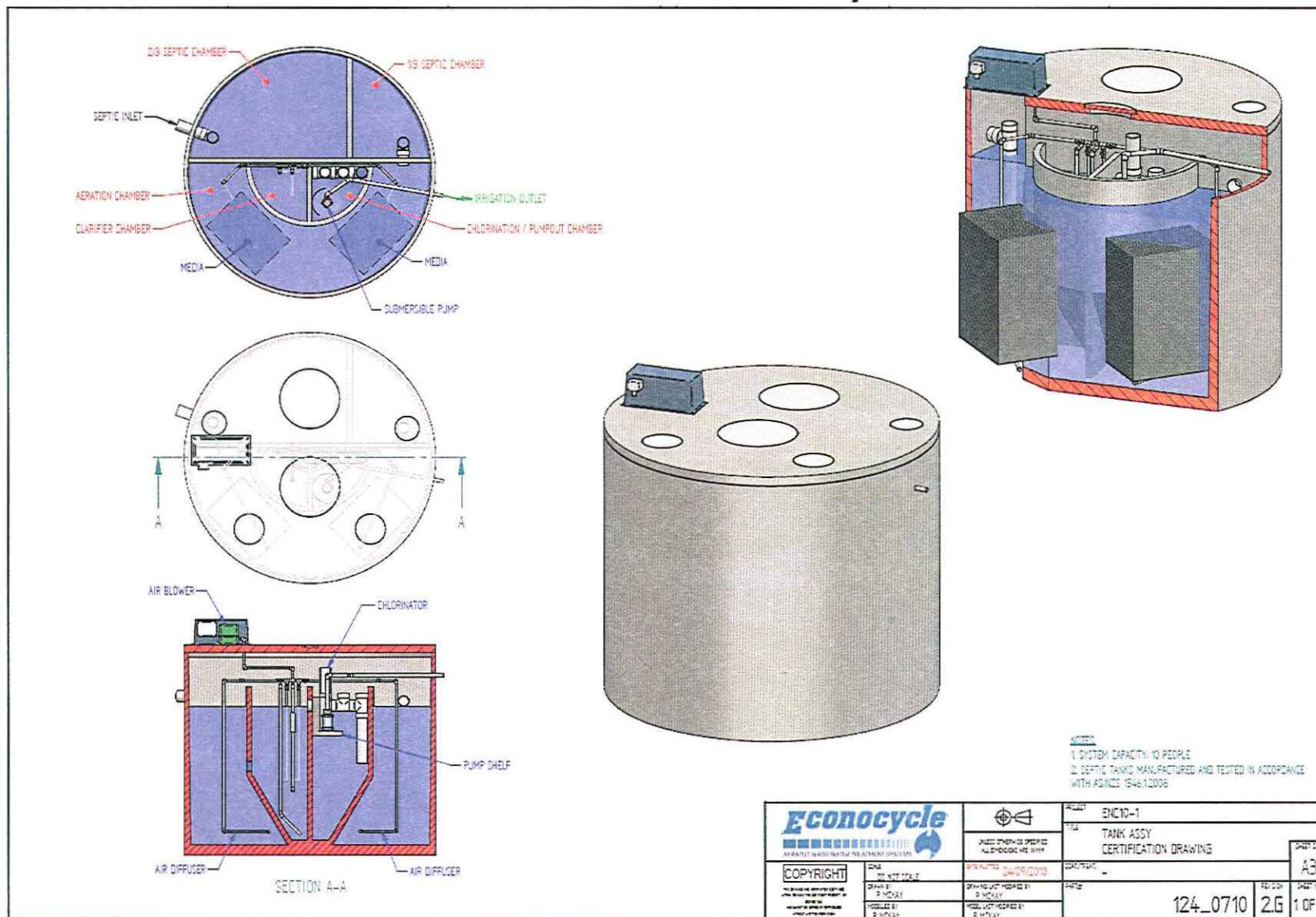


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